

### REMARKS

This Amendment is submitted in response to the Office Action mailed October 16, 2007. Claims 1, 3, 5-11 are pending. In this Amendment, claims 1, 7, and 8 are amended. Claims 2 and 4 are cancelled. No new matter is added.

### Claim Objections

The Examiner has objected to the claims for including a reference character which is not enclosed within parentheses.

Applicant has amended claim 8 to overcome the claim objection.

### 35 U.S.C. § 102 Rejections

Claims 1, 3, 6-8 and 10-11 are rejected under 35 U.S.C. § 102(b) as being anticipated by Knee et al. 5,994,710 (hereinafter, "Knee").

In this regard, we compare Claim 1 of the present invention and Knee, focusing our analysis on Claim 1 since Claims 1 and 7 are independent claims and have the same technical features.

Claim 1 (Please see Fig. 2) recites an apparatus for implementing mouse function and scanner function alternatively, **comprising an input device for having a region capable of scanning including a position tracing region (220 and 230)** for detecting a transition of position of said apparatus.

In this regard, the position tracing region (220 and 230), which could be constituted by CCD or CIS, etc., is an integral part of the region capable of

scanning; thus, it is able to scan an image at the position tracing region (220 and 230). Namely, if a user selects the scanner function, the present invention enables image data detected from the entire region capable of scanning to be transmitted.

In contrast, Knee comprises image sensors (26, 29, 30) such as CCD or CIS and navigation sensors (20, 21) used in an optical mouse **as separate elements** as shown in Figs. 2A~2C.

As can be seen above, the present invention discloses that the position tracing region is an integral part of the region capable of scanning whereas Knee discloses that navigation sensors (20, 21) are separated from image sensor. Thus, the present invention is distinguished from Knee in constitution.

Due to the constitutional difference, the present invention produces superior effects as follows:

The present invention could easily manufacture the apparatus by **simplifying elements** (reducing the number of elements), thereby, **reducing costs**; thus, the present invention is **economical** because unlike Knee, the image sensors (region excluding the position tracing region from the region capable of scanning in the present invention) and the navigation sensors (the position tracing region in the present invention) are unified, not separated. Further, the present invention produces a superior effect such that the apparatus of the present invention **could be easily carried** since its elements are unified and thus the apparatus is small.

And, it is not necessary to adjust positions between elements because the elements are made integral. The correct position adjustment of the position tracing region is an important step for precise scanning when manufacturing an actual apparatus. If the scanning region is separated from the position tracing region, it is quite probable that an error could occur in scanning. However, if the position tracing region is an integral part of the region capable of scanning as disclosed in the present invention, **productivity is increased since the error rate is decreased.**

Further, by making the position tracing region to be an integral part of the region capable of scanning, its moving angle and the like could be simply calculated when the apparatus of the present invention is moved; thus, a remarkable rate reduction in image processing could be expected.

Moreover, the present invention has the effect of **maximizing the region to be scanned** since it can scan at the part where Knee cannot because of the navigation sensors. That is, the present invention allows the apparatus to scan at its side parts where the apparatus of Knee can not scan because of the navigation sensors; thus, the region to be scanned is maximized. However, according to the present invention, **the portion of a subject to be scanned at one time could be maximized; it is possible to scan efficiently without scanning repeatedly.**

In particular, when scanning a curved surface such as the side of a can, the apparatus of the present invention could also scan at the position tracing region, and thus it could scan a broader surface more precisely. In contrast, the

apparatus of Knee could scan only at image sensors excluding navigation sensors, and thus it could incorrectly scan a smaller surface than the present invention.

Further, the present invention could **correctly position the subject to scan without trial and error** because according to the present invention, the boundary of scanning can be easily identified.

In light of the above, the present invention is distinguished from Knee in terms of the constitution and effect. Therefore, the present invention has inventive step as well as novelty over Knee.

Applicant, accordingly, respectfully requests withdrawal of the rejections of claims 1, 3, 6-8 and 10-11 under 35 U.S.C. § 102(b) as being anticipated by Knee.

#### 35 U.S.C. § 103 Rejections

Claim 5 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Knee in view of Bilbrey et al. 4, 543, 571 (Bilbrey).

Claim 5 of the present invention is depending from claim 1, which has inventive step over Knee as explained above.

Therefore, claim 5 is distinguished from Knee in terms of the constitution and effect for at least the same reason as claim 1.

Applicant, accordingly, respectfully requests withdrawal of the rejections of claim 5 under 35 U.S.C. § 103(a) as being unpatentable over Knee in view of Bilbrey.

Claim 9 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Knee.

Claim 9 of the present invention is depending from claim 7, which has inventive step over Knee as explained above.

Therefore, claim 9 is distinguished from Knee in terms of the constitution and effect at least for the same reason as claim 7.

Applicant, accordingly, respectfully requests withdrawal of the rejections of claim 9 under 35 U.S.C. § 103(a) as being unpatentable over Knee.

Applicant respectfully submits that the present application is in condition for allowance. If the Examiner believes a telephone conference would expedite or assist in the allowance of the present application, the Examiner is invited to call the undersigned at (408) 720-8300.

Please charge any shortages and credit any overages to Deposit Account No. 02-2666. Any necessary extension of time for response not already requested is hereby requested. Please charge any corresponding fee to Deposit Account No. 02-2666.

Respectfully submitted,  
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